

[0056] During occupant energy attribution processing (step 340), two sub-steps are performed. At step 830, the process retrieves the number of occupants that were found to be users of the selected device, and at step 840, the process attributes a proportional share of the energy consumed by device to each of the occupants that were found to be users of the device. The amount of energy attributed to each of the occupants is stored in memory area 555.

[0057] At step 350, the process identifies devices that are not being used and, thus, wasting energy. At sub-step 850, the process tracks wasted energy consumed by this device. The amount of wasted energy is stored in memory area 555 and is also reflected in energy waste report 570.

[0058] The process determines as to whether there are more energy consuming devices to select and process (decision 860). If there are more energy consuming devices to select and process, then decision 860 branches to the 'yes' branch which loops back to step 810 to select and process the next device as described above. This looping continues until there are no more energy consuming devices to select and process, at which point decision 860 branches to the 'no' branch exiting the loop. At predefined process 870, the process performs the Occupant Based Energy Consumption Reporting routine (see FIG. 9 and corresponding text for processing details). FIG. 8 processing thereafter returns to the calling routine (see FIG. 5) at 895.

[0059] FIG. 9 is a flowchart showing steps that report occupant-based energy consumption. FIG. 9 processing commences at 900 and shows the steps taken by a process that performs Occupant Based Energy Consumption Reporting. At step 905, the process selects the first occupant from memory area 545. At step 910, the process selects the first energy consuming device connected to the selected occupant.

[0060] At step 915, the process increments the occupant's total energy usage by the amount of energy attributed to the selected occupant for selected device. The energy attributed to the selected occupant is retrieved from memory area 555 and the accumulated total amount of energy attributed to the selected occupant is stored in memory area 920.

[0061] The process determines as to whether there are more devices that are connected to the selected occupant (decision 925). If there are more devices that are connected to the selected occupant, then decision 925 branches to the 'yes' branch which loops back to step 910 to select and process the energy attribution for the next device that is connected to this occupant. This looping continues until there are no more devices that are connected to the selected occupant, at which point decision 925 branches to the 'no' branch exiting the loop.

[0062] At step 930, the process retrieves the total amount of energy attributed to the selected occupant. The process next determines as to whether the selected occupant was able to be identified during earlier identification processing (decision 935). If the selected occupant was able to be identified, then decision 935 branches to the 'yes' branch to perform steps 940 and 950. On the other hand, if the selected occupant was unable to be identified, then decision 935 branches to the 'no' branch to perform step 955.

[0063] If the selected occupant was able to be identified then, at step 940, the process retrieves the identified occupant's reporting identifiers (e.g., the occupant's name, social media identifier, email address, other contact information,

etc.). The occupant's data is retrieved from a profile that is retrieved from data store 945. At step 950, the process reports this occupant's energy usage with optional consumption details. The reporting can be made to any number of outlets such as social media websites 565, the occupant (email, phone, etc.), and reports 570.

[0064] On the other hand, if the selected occupant was unable to be identified then, at step 955, the process reports on the unknown occupant's energy usage and optional consumption details. The reporting can be made to any number of outlets such as social media websites 565, managers that oversees energy usage, and reports 570.

[0065] The process determines as to whether there are more occupants in memory area 545 that need to be selected and processed (decision 960). If there are more occupants to process, then decision 960 branches to the 'yes' branch which loops back to step 905 to select and process the next occupant as described above. This looping continues until there are no more occupants to select, at which point decision 960 branches to the 'no' branch exiting the loop. FIG. 9 processing thereafter returns to the calling routine (see FIG. 8) at 995.

[0066] While particular embodiments of the present invention have been shown and described, it will be obvious to those skilled in the art that, based upon the teachings herein, that changes and modifications may be made without departing from this invention and its broader aspects. Therefore, the appended claims are to encompass within their scope all such changes and modifications as are within the true spirit and scope of this invention. It will be understood by those with skill in the art that if a specific number of an introduced claim element is intended, such intent will be explicitly recited in the claim, and in the absence of such recitation no such limitation is present. For non-limiting example, as an aid to understanding, the following appended claims contain usage of the introductory phrases "at least one" and "one or more" to introduce claim elements. However, the use of such phrases should not be construed to imply that the introduction of a claim element by the indefinite articles "a" or "an" limits any particular claim containing such introduced claim element to inventions containing only one such element, even when the same claim includes the introductory phrases "one or more" or "at least one" and indefinite articles such as "a" or "an"; the same holds true for the use in the claims of definite articles.

What is claimed is:

1. A method executed by an information handling system comprising one or more processors and a memory, the method comprising:

receiving a plurality of current locations from one or more sensors, wherein each of the current locations corresponds to one or more occupants occupying an area; determining a plurality of identifiers corresponding, wherein each of the identifiers corresponding to one of the occupants;

receiving a plurality of energy consumption values, wherein each of the energy consumption values corresponds to an energy consuming device;

identifying a device location pertaining to each of the energy consuming devices; and

attributing an amount of energy consumed to each of occupants that correspond to a determined identifier, wherein the attributing is based on the occupants' current locations and the device locations.